

Remarks

In view of the above amendments and the following remarks, reconsideration of the rejections and further examination are requested.

Initially, the Applicants would like to thank the Examiner for conducting the personal interview on September 14, 2005 in which the present application was discussed. During the interview, proposed claim amendments to claim 1 were discussed with respect to the references relied upon in the outstanding Office Action. While the amendments to claim 1 included herewith are not identical language-wise to those discussed during the interview, it is noted that the amendments are similar in a technical manner.

Further, it is noted that the Office Action fails to acknowledge that the claim of priority filed on October 1, 2003 has been perfected. As a result, such acknowledgement is respectfully requested in the next Office Action.

Claims 4, 5, 7-11, 15, 16, 18 and 19 have been indicated as containing allowable subject matter. The Applicant would like to thank the Examiner for this indication of allowable subject matter.

It is noted that claims 2 and 12-19 have been canceled without prejudice or disclaimer to the subject matter contained therein.

Claims 1, 2, 12 and 13 have been rejected under 35 U.S.C. §102(e) as being anticipated by Bode (US 6,249,246). Claims 3, 6, 14 and 17 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Bode in view of Horton (US 6,647,352).

Claim 1 has been amended so as to further distinguish the present invention over the references relied upon in the above-mentioned rejections. Claims 3 and 7 have been amended so as to be consistent with the amendments to claim 1.

Further, claim 8 has been amended so as clarify one of the features contained therein. This amendment to claim 8 does not narrow the scope of protection offered by the claim, nor does it address issues related to patentability and therefore, the amendment should not be construed as limiting the scope of equivalents of the claimed feature offered by the Doctrine of Equivalents.

In light of the amendments to claim 1, the above-mentioned rejections are submitted to no longer be applicable for the following reasons.

Claim 1 is patentable over Bode, since claim 1 recites a sensor unit including, in part, a combining circuit including at least a first signal line through which a high-frequency signal output from an antenna section is sent, a second signal line through which a signal output from a sensor section is sent, and a node for generating a composite signal by combining the high-frequency signal from the antenna section and the signal output from the sensor section such that the high-frequency signal and the signal occupy different frequency bandwidths and are output from the node simultaneously, the node being a connection point of the first signal line and the second signal line. Bode fails to disclose or suggest the node recited in claim 1.

Bode discloses a location sensor 10 having a position filter 6 that receives signals from a GPS receiver 1, a direction sensor 3, a displacement sensor 4, an altimeter 7, a speed transducer 8 and a temperature sensor 12. The position filter 6 uses the signals to calculate a vehicle position, direction of travel and distance traveled and outputs this information at an output 9. In calculating the different information for output, the position filter 6 is disclosed as being able to appropriately weight the signals that it receives in order to perform accurate calculations. For example, the position filter 6 will weight the signal from the GPS receiver 1 with a high priority if the GPS receiver 1 is receiving signals from an appropriate number of GPS satellites, and therefore, will weight the signals from the direction sensor 3 and the displacement sensor 4 with a lower priority. However, the weighting is opposite if the GPS receiver 1 cannot receive signals from the requisite number of GPS satellites. (See column 2, lines 31-65; column 3, lines 13-52; and Figure 2).

In the rejection, the output 9 is indicated as corresponding to the claimed node. However, as discussed above, Bode clearly indicates that the vehicle position, direction of travel and distance traveled calculated by the position filter 6 are sent to the output 9 and not signals from the sensors/receivers of the location sensor 10. Therefore, the output 9 cannot be said to correspond to the claimed node because the node is recited as generating the composite signal by combining the high-frequency signal from the antenna section and the signal output from the sensor section. Further, it is noted that Bode fails to provide any indication as to the manner in which the vehicle position, direction of travel and distance traveled are transmitted from the output 9. In other words, there is no disclosure or suggestion that the vehicle position, direction of travel and distance traveled are combined at the output 9 such that they occupy different frequency bandwidths and are output

from the output 9 simultaneously. As a result, claim 1 is patentable over Bode.

As for Horton, it discloses an A/D converter 21 that receives signals from a number of different sensors 9-11, 13-15, 17 and 18a-c and generates a digital signal that is output to a processor 23. However, Horton also discloses that the A/D converter 21 transmits the data from the sensors 9-11, 13-15, 17 and 18a-c in a time-share mode. (See column 3, line 65 – column 4, line 14 and Figure 2).

It is apparent that the use of the time-share mode means that the A/D converter 21 transmits the data from the sensors 9-11, 13-15, 17 and 18a-c one at a time. In other words, the A/D converter 21 transmits the data from a first of the sensors 9-11, 13-15, 17 and 18a-c to the processor 23 for a given period of time. Then, the A/D converter 21 transmits the data from a second of the sensors 9-11, 13-15, 17 and 18a-c to the processor 23 for the next period of time, and so on until the data from all of the sensors 9-11, 13-15, 17 and 18a-c has been transmitted to the processor 23. Once the data from all of the sensors has been transmitted, the transmitting process is repeated. Since the data from the respective sensors 9-11, 13-15, 17 and 18a-c is sent one at a time, this transmission method is referred to as time-share mode.

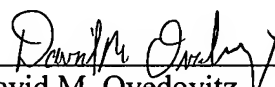
On the other hand, claim 1 recites that node generates a composite signal by combining the high-frequency signal from the antenna section and the signal output from the sensor section such that the signals occupy different frequency bandwidths and are output from the node simultaneously (i.e., concurrently). It is clear that this differs from the disclosure of Horton, since Horton transmits the data from the sensors one at a time. As a result, Horton also fails to disclose or suggest this feature of claim 1.

Because of the above-mentioned distinctions, it is believed clear that claims 1 and 3-11 are allowable over the references relied upon in the rejections. Furthermore, it is submitted that the distinctions are such that a person having ordinary skill in the art at the time of invention would not have been motivated to make any combination of the references of record in such a manner as to result in, or otherwise render obvious, the present invention as recited in claims 1 and 3-11. Therefore, it is submitted that claims 1 and 3-11 are clearly allowable over the prior art of record.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance. The Examiner is invited to contact the undersigned by telephone if it is felt that there are issues remaining which must be resolved before allowance of the application.

Respectfully submitted,

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